Type of Article: *Review article*

Oral Health in Dementia-A Review

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Abstract

Dementia is a neurodegenerative disorder affecting the cognitive and motor skill of the patients. It can be reversible and irreversible. People with dementia lose their ability to do basic procedures to maintain oral hygiene thus poor oral hygiene and its associated oral diseases are not an uncommon findings in these patients. In this review we will be discussing about various oral conditions faced by these patients.

Keywords: *dementia, xerostomia, periodontitis, Siallorrhea*

Introduction

People with neurodegenerative diseases like dementia have the tendency to ignore oral health completely. But oral health is significantly directly proportional to their quality of living. Poor condition of oral cavity can affect their diet, nutrition, behavior alterations, life expectancy [1-3].Often neglected carious tooth and apparently harmless periodontal diseases can be one of the causative factors for a serious disease like Aspiration pneumonia [4].Various difficulties are face by these older people suffering from dementia which includes problems regarding wearing the dentures, failure to take care of oral health successfully by basic oral hygiene procedures [5-10].Thus it affects their eating habit greatly and the cause can be due to pain by ill fitting dentures, non-functional dentition. Not only has their eating habit the matter of their self confidence also broken because of their unaesthetic appearance [11].

DEMENTIA: According to WHO**,** It is a progressive, neurodegenerative disease that affects the cognitive function, (i.e. the ability to process thought) beyond what could be expected from normal ageing. It affects memory, thinking, orientation, comprehension, calculation, learning capacity, language, and judgment. Consciousness is not affected. The impairment in cognitive function is usually accompanied, and infrequently preceded, by deterioration in emotional control, social behavior, or motivation. Dementias can be Reversible and Irreversible (e.g. Alzheimer's disease, Parkinson's disease).

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ORAL HEALTH CARE IN DEMENTIA:

Factors affecting their ability to take care of oral health:-

a) Stage of dementia the person is in.

b) Level of damage in that persons' level of processing thoughts and disability towards physical activity.

c) Person lacking awareness regarding oral health problems he is going through.

d) These peoples' capability to take health care benefits from care givers.

e) Ability to give consent to oral health care.

f) Level of Motivation.

g) Awareness towards the methods to avail oral health care.

h) Dental professionals' awareness towards diseases like dementia.

PROBLEMS REGARDING ORAL HEALTH

Till date because of the difficulties to obtain a longitudinal study on the people suffering from dementia, not many records are there. The people with dementia gradually lose their cognitive acquired motor skills, along with it the confidence to properly take care of oral hygiene by basic means [9-12]. So it has been seen there is increase in caries index in these types of patients. Raise in plaque and calculus in these people pose a threat to their oral hygiene status. Oral diseases that they readily encounter are as follows:

1. PERIODONTAL DISEASE: Higher is the risk of having gingivitis and subsequently periodontitis with increasing level of dementia. High plaque index due to the inability of these patients to control motor functions since removal of both calculus and plaque requires well controlled motor functions [6,7]. Bleeding from gingiva is also not an uncommon manifestation. Due to the correlation of periodontitis with multiple systemic diseases like diabetes mellitus type 2 and cardiovascular disease, treatment should not be delayed in these patients in order to reduce the health risk [13].

2. DENTAL CARIES: Patients with dementia due to their decrease in cognitive skills are not able to avail the dental services regularly. It has been seen that patients staying in different care giver homes have comparatively having more oral health related problems than those who are not [14]. Through some researches it has been noted as the level or stages of their dementia rises more deterioration in their oral health and hygiene occurs including prevalence of dental caries [12] which is often accompanied by reduced salivary flow. In a study paper Comparison has been made between dentate people with dementia staying in a community and with that of non dementia people in same environment which concludes that there is high prevalence of both radicular and coronal caries in people with dementia than those without it. Apart from this it also concluded that factors like sex of the patients especially here the male patients, with their reduction in salivary flow, consumption of antipsychotic medication all contribute as a risk for dental caries.

3. ORAL CONDITION DUE TO MEDICATIONS: People in old age only suffer from dementia. A number of health related problems faced by these patients are often dealt with many different drugs including the drugs which are used to treat conditions like anxiety, depression, psychosis, insomnia and other systemic illness related to old age. Certain medications are also given to them to control or slow the stages of dementia. There are medications like that of anticholinesterases, antidepressants, antipsychotics, anti anxiolytics which help to control their mood swings and slower their failure in cognitive functions. Unfortunately these drugs show the side effect of Xerostomia. Study found that prevalence and susceptibility to caries are largely increased by the use of these neuroleptics [10]. It is also found that Anticholinesterases can cause glossitis, Mucositis caused by Antipsychotics, whereas gingival hyperplasia, oral ulceration, erythema multiforme and loss of taste are all caused by Anticonvulsants [9,15,16]. Proper salivary flow is important for variety of reasons, most importantly to keep dental caries at check. Saliva acts as buffer and has the function of washing away debris in the mouth preventing bacterial colonization. So reduction in the flow of it results in bacterial accumulation, increased plaque, calculus, caries susceptibility and gingival inflammation which in turn causes painful gingiva that makes these patients divert from brushing leading to poor oral hygiene [17,18]. Denture induced stomatitis, dry and cracked lips are also seen as manifestations of poor oral health [7]. Probability of Rampant caries is also seen in some cases where syrup based medications are given to these patients.

Besides Xerostomia, Siallhorrea can also pose difficulty in patients with dementia like people suffering from Alzheimer's disease. Unconditional drooling occurs mainly due to dysphagia i.e difficulty in swallowing which sometimes leads to perioral ulcerations, infection, foul odor for which people keep distance from them, frequent need to change dresses, lower self confidence and depression which in turn make them, to take anti depressant medications.

CONCLUSION:

Emphasis should be laid on the people with dementia regarding their capability to maintain basic oral hygiene procedures as these patients lose their cognitive and

motor skills. Numerous oral manifestations that occur in these patients as a result of their negligence should be considered and necessary measures should be taken to combat those situations. Dental professionals and care givers should get a thorough history about the list of medications these old people are receiving and manage accordingly. A little bit of attention can make their life a lot better and help them get back their lost self esteem.

Ethical Clearance – Not required since it is a review article

Source of Funding – Nil

Conflict of Interest – Nil

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